

**CLAIMS**

1. A method for classifying a first video type and a second video type in a video signal having a series of frames, comprising the steps of:

(A) reading a first set of parameters defining an active  
5 portion of a first of said frames;

(B) reading a second set of parameters defining an active portion of a second of said frames;

(C) comparing said first set of said parameters with said second set of parameters to generate a comparison value;

10 (D) if said comparison value is above a predetermined threshold, indicating the first video type; and

(E) if said comparison value is not above said predetermined value, indicating the second video type.

2. The method according to claim 1, wherein (i) said first video type comprises a commercial and said second video type comprises a program.

3. The method according to claim 1, wherein said first set of parameters comprises a first four set (T, B, L, R), where

03-1918  
1496.00351

(i) T represents a first number of lines from a top of a nominally active area, (ii) B represents a second number of lines from a bottom of the nominally active area, (iii) L represents a first number of columns from a left of the nominally active area, and (iv) R represents a second number of columns from a right of the nominally active area.

4. The method according to claim 3, wherein:

the number of lines T comprises video with no material non-black content;

the number of lines B comprises video with no material non-black content;

the number of lines L comprises video with no material non-black content; and

the number of lines R comprises video with no material non-black content.

5. The method according to claim 3, wherein said second set of parameters comprises a second four set (T, B, L, R), where (i) T represents a first number of lines from a top of a nominally active area, (ii) B represents a second number of lines from a

03-1918  
1496.00351

5 bottom of the nominally active area, (iii) L represents a third number of lines from a left of the nominally active area, and (iv) R represents a fourth number of lines from a right of the nominally active area.

6. The method according to claim 5, wherein, in the second four set:

the number of lines T comprises video with no materially non-black content;

5 the number of lines B comprises video with no materially non-black content;

the number of lines L comprises video with no materially non-black content; and

10 the number of lines R comprises video with no materially non-black content.

7. The method according to claim 5, wherein step (D) comprises comparing (i) an absolute value of the difference of said T parameters, plus (ii) an absolute value of the difference of said B parameters, plus (iii) an absolute value of the difference of

03-1918  
1496.00351

5     said L parameters, plus (iv) an absolute value of the difference of  
said R parameters, to the threshold value.

8.     The method according to claim 1, wherein (i) said  
predetermined value comprises a first threshold to determine if the  
first frame and the second frame are part of an unbroken segment  
and (ii) said predetermined value comprises a second threshold to  
5     determine if the first frame and the second frame have the same set  
of parameters.

9.     The method according to claim 1, wherein said video  
signal comprises a digital video signal.

10.    An apparatus comprising:

a first detector circuit configured to generate (i) a  
first set of parameters defining an active portion of a first frame  
of a video signal having a series of frames and (ii) a second set  
5     of parameters defining an active portion of a second frame of said  
video signal; and

a second detector circuit configured to generate a  
transition indication signal in response to a comparison between

03-1918  
1496.00351

(i) said first set of parameters and (ii) said second set of  
10 parameters.

11. The method according to claim 10, wherein said  
further detector circuit comprises a 4-set detector.

12. The apparatus according to claim 10, wherein said  
detector circuit comprises a segment detector.

13. The apparatus according to claim 10, wherein said  
first detector generates said first set of parameters and said  
second set of parameters in response to (i) a threshold signal and  
(ii) one or more samples.

14. The apparatus according to claim 10, further  
comprising:

a controller (i) connected between said first detector  
and said second detector and (ii) configured to control said first  
5 detector and said second detector.

03-1918  
1496.00351

15. The apparatus according to claim 10, wherein said program indication signal indicates a transition between a first program type and a second program type.

16. A method for distinguishing between a commercial and a program in a digital video signal having a series of frames, comprising the steps of:

(A) determining a first truly active region of a first  
5 of said frames;

(B) determining a second truly active region of a second  
of said frames; and

(C) if said first truly active region is substantially  
similar to said second truly active region, indicating a first  
10 segment signature.

17. The method according to claim 16, further comprising  
the step of:

if said first truly active region is not substantially  
similar to said second truly active region, indicating a second  
5 segment signature.

03-1918  
1496.00351

18. The method according to claim 17, wherein said first segment signature represents a commercial and said second segment signature represents a program.

19. The method according to claim 18, wherein said method further comprises implementing a commercial advance by:

skipping said first segment signatures; and  
returning to said second segment signatures.

20. A method for segmenting a video signal into program and commercial segments, comprising the steps of:

(A) reading a first set of parameters defining a signature for a first program segment;

5 (B) detecting the end of said first program segment;

(C) reading a second set of parameters defining a second segment;

(D) comparing said second set of parameters to said first set of parameters; and

10 (E) if said first set of parameters and said second set of parameters are substantially similar, classifying said second segment as a program segment.

03-1918  
1496.00351

21. The method of claim 20, wherein said parameters indicate start of active video.